AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of continuously coating and fabricating spiraled steel rebar product for concrete structures comprising the sequential steps of:

(a) supplying a linear uncoated rebar to a polymeric powder-coating unit; ~~and~~

(b) applying a substantially uniform coating layer of a polymeric material onto the uncoated rebar to form a linear coated rebar; and thereafter

(c) ~~(b)~~ bending the linear coated rebar into a spiraled steel rebar product, wherein between steps (a) and (b) there is practiced the step of,

(a1) abrading the surface of the linear uncoated rebar by directing a dry grit against the surface of the linear uncoated rebar with sufficient abrasive force to remove surface debris and/or oxidation therefrom and to provide a desired anchor profile to improve mechanical adherence of the coating layer of polymeric material.

2. (Currently Amended) The method of claim 1, wherein step ~~(b)~~ (c) includes bending the linear coated rebar by bringing ~~it~~ the linear coated rebar into contact with a series of bending wheels comprised of separated upstream and downstream bending wheels and a central bending wheel which is disposed between and below said upstream and downstream bending wheels.

3. (Currently Amended) The method of claim 2, wherein step ~~(b)~~ (c) is practiced using bending wheels which include a ~~rubber-like~~ rubber tire mounted on a rigid rotatable wheel member.

4. (Currently Amended) The method of claim 3, wherein step (a) includes the ~~sequential steps~~ step of ~~(a1)~~ (a2) heating the uncoated rebar to an elevated temperature sufficient to fuse an epoxy powder, ~~(a2) surface-abrading the rebar to achieve a desired anchor profile for the epoxy powder, (a3)~~ and wherein step (b) includes the step of (b1) electrostatically spray coating the heated and uncoated rebar with the epoxy powder and allowing the epoxy powder to fuse to thereby form a coated rebar having a substantially uniform coating of epoxy, and thereafter ~~(a4)~~ (b2) curing the epoxy coating on the coated rebar.

5. (Currently Amended) The method of claim 4, wherein after step ~~(a4)~~ (b2) and before step ~~(b)~~ (c), there is practiced subjecting the coated rebar to a water quench.

6. (Currently Amended) The method of claim 1 or 4, which further includes between steps ~~(a) and~~ (b) and (c) the step of determining defects in the epoxy coating.

7. (Currently Amended) The method of claim 4, wherein step ~~(a1)~~ (a2) is practiced by passing the uncoated rebar through an induction heater.

8. (Original) The method of claim 7, wherein the rebar is heated to a temperature of at least about 450^0F.

9. (Original) The method of claim 4, wherein prior to step (a1), there is practiced the step of uncoiling the uncoated rebar from a supply coil thereof.

10. (Currently Amended) The method of claim 9, ~~further comprising prior to~~ wherein step (a1) includes the step ~~the steps~~ of ~~(a4)~~ (a3) straightening the uncoiled and uncoated rebar~~, and (a5) cleaning an exterior surface of the uncoiled and uncoated rebar~~.

11. (Currently Amended) A system for the continuous coating and fabrication of spiraled steel rebar product for concrete structures comprising:

(a) a polymeric powder-coating unit which receives uncoated linear rebar and applies a substantially uniform coating layer of a

polymeric material onto exterior surface of the uncoated rebar to form a linear coated rebar; and

(b) a bending unit for bending the linear coated rebar into a spiraled steel rebar product; and

(c) an abrading unit disposed upstream of the coating unit for directing a dry grit against a surface of the linear uncoated rebar with sufficient abrasive force to remove surface debris and/or oxidation therefrom and to provide a desired anchor profile to improve mechanical adherence of the coating layer of polymeric material.

12. (Original) The system of claim 11, wherein the bending unit includes a series of bending wheels which contact the linear coated rebar during bending, said series of bending wheels being comprised of separated upstream and downstream bending wheels and a central bending wheel which is disposed between and below said upstream and downstream bending wheels.

13. (Currently Amended) The system of claim 12, wherein the upstream, downstream and central bending wheels include a ~~rubber-like~~ rubber tire mounted on a rigid rotatable wheel member.

14. (Original) The system of claim 13, which further comprises (a1) a heating unit for heating the uncoated rebar to an elevated temperature sufficient to fuse an epoxy powder, and (a2) a coating unit for electrostatically spray coating the heated and uncoated rebar with the epoxy powder and allowing the epoxy powder to fuse to thereby form a coated rebar having a substantially uniform coating of epoxy.

15. (Original) The system of claim 14, further comprising a quench cabinet downstream of said coating unit for spraying the coated rebar with a water quench.

16. (Currently Amended) The system of claim 11 or 15, which further includes a coating defect detection system for determining defects in the ~~epoxy~~ coating layer of polymeric material.

17. (Original) The system of claim 14, wherein the heating unit includes an induction heater.

18. (Currently Amended) The system of claim 17, wherein the inducting heater is capable of heating the uncoated rebar ~~is heated~~ to a temperature of at least about 450^0F.

19. (Original) The system of claim 14, comprising a rebar straightener for straightening uncoated rebar which is uncoiled from a supply coil thereof.

20. (Original) The system of claim 11, wherein the bending unit includes a support spool which is connected to and extends coaxially outwardly from the central bending wheel in a cantilevered manner.

21. (Currently Amended) A method of continuously coating and fabricating spiraled steel rebar product for concrete structures comprising the steps of:

(a) providing a supply coil of uncoated rebar;

(b) uncoiling the uncoated rebar from the supply coil thereof and removing coil-shape memory from the uncoiled and uncoated rebar to provide linear uncoated rebar;

(c) supplying the linear uncoated rebar to a polymeric powder-coating unit and electrostatically spray-coating ~~applying~~ a substantially uniform coating layer of a polymeric coating material onto the uncoated rebar to form a linear coated linear rebar; and thereafter

(d) bending the linear coated rebar into a spiraled steel rebar product; wherein

(e) prior to electrostatically spray-coating the uncoated rebar, there is practiced the steps of (i) abrading the uncoated rebar surface to achieve a desired anchor profile for the epoxy, and (ii) heating the uncoated rebar.

22. (Previously Presented) The method of claim 21, further comprising heating the uncoated rebar to an elevated temperature sufficient to fuse a polymeric powder.

23. (Canceled)

24. (Currently Amended) The method of claim ~~23~~ 21, wherein step (c) is practiced by electrostatically spray-coating the uncoated rebar with an epoxy.

25. (Canceled)

26. (Currently Amended) The method of claim ~~25~~ 24, comprising curing the epoxy coating on the coated rebar.

27. (Previously Presented) The method of claim 26, comprising after curing, subjecting the coated rebar to a water quench.

28. (Previously Presented) The method of claim 26, further comprising testing the coated rebar for coating defects.

29. (Previously Presented) The method of claim 28, wherein said step of testing the coated rebar comprises bringing the coated rebar into contact with wet sponge material charged with an electrical potential.

30. (Previously Presented) The method of claim 29, wherein said step of testing the coated rebar comprises generating an alarm in response to detection of a coating defect by the electrically charged wet sponge material.

31. (Previously Presented) A system for continuously coating and fabricating spiraled steel rebar product for concrete structures comprising:

(a) a rebar straightener for uncoiling uncoated rebar from a supply coil thereof and removing coil-shape memory from the uncoiled and uncoated rebar to provide linear uncoated rebar;

(b) an abrading unit for abrading the surface of the uncoated linear rebar to achieve a desired anchor profile for the polymeric coating material;

(c) ~~(b)~~ a polymeric powder-coating unit for applying a substantially uniform coating layer of a polymeric coating material onto the uncoated linear rebar to form a linear coated rebar; and

(d) ~~(c)~~ a bending unit for bending the linear coated rebar into a spiraled steel rebar product.

32. (Previously Presented) The system of claim 31, further comprising a heating unit for heating the uncoated rebar to an elevated temperature sufficient to fuse a polymeric powder.

33. (Canceled)

34. (Currently Amended) The system of claim ~~33~~ 31, wherein said polymeric powder-coating unit comprises an electrostatic spray-coating nozzle.

35. (Previously Presented) The system of claim 31, comprising upstream of said powder-coating unit (i) an abrader for abrading the uncoated rebar surface to achieve a desired anchor profile for the polymeric coating material, and (ii) a heater for heating the uncoated rebar.

36. (Previously Presented) The system of claim 31, further comprising a curing unit for curing the ~~epoxy~~ polymeric coating material on the coated rebar.

37. (Previously Presented) The system of claim 36, wherein said curing unit comprises a quench cabinet for subjecting the coated rebar to a water quench.

38. (Previously Presented) The system of claim 31, further comprising a testing unit for testing the coated rebar for coating defects.

39. (Previously Presented) The system of claim 38, wherein testing unit comprises wet sponge material, and an electrical potential generator connected

electrically to said wet sponge material for charging the wet sponge material with an electrical potential.

40. (Previously Presented) The system of claim 39, wherein said testing unit further comprises an alarm unit which generates an alarm in response to detection of a coating defect by the electrically charged wet sponge material.

41. (New) A method of continuously coating and fabricating spiraled steel rebar product for concrete structures comprising the steps of:

(a) providing a supply coil of uncoated rebar;

(b) uncoiling the uncoated rebar from the supply coil thereof and removing coil-shape memory from the uncoiled and uncoated rebar to provide linear uncoated rebar;

(c) supplying the linear uncoated rebar to a polymeric powder-coating unit and applying a substantially uniform coating layer of a polymeric coating material onto the uncoated rebar to form a linear coated linear rebar;

(d) testing the linear coated rebar for coating defects by bringing the coated rebar into contact with wet sponge material charged with an electrical potential; and thereafter

(e) bending the linear coated rebar into a spiraled steel rebar product.

42. (New) The method of claim 29, wherein step (d) comprises the step (d1) generating an alarm in response to detection of a coating defect by the electrically charged wet sponge material.

43. (New) A system for continuously coating and fabricating spiraled steel rebar product for concrete structures comprising:

(a) a rebar straightener for uncoiling uncoated rebar from a supply coil thereof and removing coil-shape memory from the uncoiled and uncoated rebar to provide linear uncoated rebar;

(b) a polymeric powder-coating unit for applying a substantially uniform coating layer of a polymeric coating material onto the uncoated linear rebar to form a linear coated rebar;

(c) a testing unit for testing the coated rebar for coating defects, wherein said testing unit comprises wet sponge material, and an electrical potential generator connected electrically to said wet sponge material for charging the wet sponge material with an electrical potential; and

(d) a bending unit for bending the linear coated rebar into a spiraled steel rebar product.

44. (New) The system of claim 39, wherein said testing unit further comprises an alarm unit which generates an alarm in response to detection of a coating defect by the electrically charged wet sponge material.